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Product Evaluation as a Function of Consumer Type and Usage Situation: Towards an Alternative Segmentation Base

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Abstract

The impact of domain-specific values and usage situations on product evaluation is investigated, and their importance for segmentation is delineated. Two questionnaires and a diary method are used to collect data about the usage and evaluation of edible fats across situations by 598 Italian families. Two types of product evaluation are distinguished: psychosocial evaluation and functional evaluation. Statistical analyses indicate that the choice of usage situations for fats is determined by domain-specific values. Functional product evaluation is more determined by usage situations than by domain-specific values. Psychosocial product evaluation is more influenced by domain-specific values than by usage situations. Implications for theory and practice are discussed.

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1. Introduction

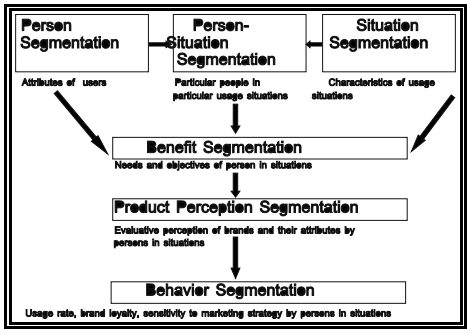
Market segmentation involves viewing a heterogeneous market as a number of smaller homogeneous markets, in response to differing preferences, attributable to the desires of consumers for more precise satisfaction of their varying wants (Robinson, 1938). These varying wants and preferences are usually conceptualized to be influenced by more or less stable consumer characteristics. The effect of personality, psychographics, life-style, perceptions, intentions, and values have been studied extensively (Leigh and Martin, 1981). However, individual difference factors are often not sufficient in explaining different consumer preferences and behaviour (Bowers, 1973). Also situational variables are of considerable importance for segmentation research (Punj and Stewart, 1983; Dickson, 1982).

This paper proposes an interactional framework for segmentation. While, other social sciences already acknowledge for decennia that behaviour is a function of personal variables and situational variables (Lewin, 1951), marketing is still not converted. The two main paradigms of behaviour in social sciences, personalism, and situationism prove to be inadequate by themselves to explain behaviour (Bowers, 1973). Personalism assumes that behaviour can largely be explained in terms of stable individual differences (Cattell, 1965; Allport, 1937). Situationism assumes that the primary determinants of behaviour lie in situational conditions rather than in stable predispositions of the individual. In interactionism, individual behaviour is not consistent across situations and stable over time (Foxall, 1990; Mischell, 1968). The interactionist approach to behaviour suggests behaviour to be a function of a continuous process of multidirectional feedback between the individual and the situation s/he encounters. As Cronbach (1957) stated: 'The organism which adapts well under one condition would not survive under another. If for each environment there is a best organism, for every organism there is a best environment'. There is an impressive literature suggesting that behaviour can be best understood in terms of the interactions between individuals and situational differences (Cantor and Kihlstrom, 1985).

Nearly every possible individual variable has been used to explain behaviour, especially values are very popular. Values are increasingly used as a basis for market segmentation (Kamakura and Novak, 1992). Also the amount of situational research in the consumer behaviour is considerable. Particularly usage situations prove to be of importance in consumer behaviour (Stewart, 1991; Punj and Stewart, 1983; Dickson, 1982; Belk, 1975a). Research has shown that the choice of beverages (Sandell, 1968; Hustad, Mayer and Whipple, 1975), snacks, meat and fast food (Belk, 1975a) is significantly defined by the interaction between the product and the situation in which the product is used. Also the preference for bread and pastry varies by meal context (Green & Rao, 1971).

While such results focus on the interaction between products and usage situation, the interaction between usage situation and consumer variables and their influence on product choice is not extensively researched. Dickson (1982) was among the first to explicitly propose a person-situation interactionist model of market segmentation. The person-situation framework he developed provides a structure that integrates two different segmentation bases: consumer psychographics and usage situation characteristics.

Figure 1: Person-Situation Benefit Segmentation (source: Dickson, 1982)



This theoretical framework integrates consumer characteristics and usage situation variables as an input for further segmentation. However, some remarks concerning this framework should be made:

- The provided framework is not empirically tested. There is no consideration whether the segments fulfil the six segmentation criteria: responsiveness, actionability, stability, substantiality, accessability, and identifiability (Frank, Massy and Wind, 1972).
- The framework is too general. No definitions are given of what the individual and usage situation characteristics exactly are, and no operational guidelines are proposed of how they are to be measured.
- The framework considers general psychographics as the consumer segmentati-

on base. This provides actionable segments but the responsiveness, accessibility, and stability of psychographic segmentation is small (Wells, 1975).

We plea for consumer segmentation, by focusing on domain-specific variables and especially domain-specific values as they prove to relate with general values on the one hand and specific product behaviour and evaluation on the other (Vinson, Scott and Lamont, 1977).

The purpose of this paper is to extend the work of Dickson, by developing a conceptual model of key factors in the person and in the situation that affect product evaluation, and to test the model empirically. Consumer variables and usage situation variables as an integrated segmentation base is very promising and enriching to segmentation literature. However, few studies on person-situation segmentation have appeared after Dickson's theoretical framework (1982). In summary, the purpose of this paper is to:

(1) Develop a conceptual model considering domain-specific values and usage situation characteristics as a segmentation base.

(2) Provide a first test of our conceptual model and present some preliminary results.

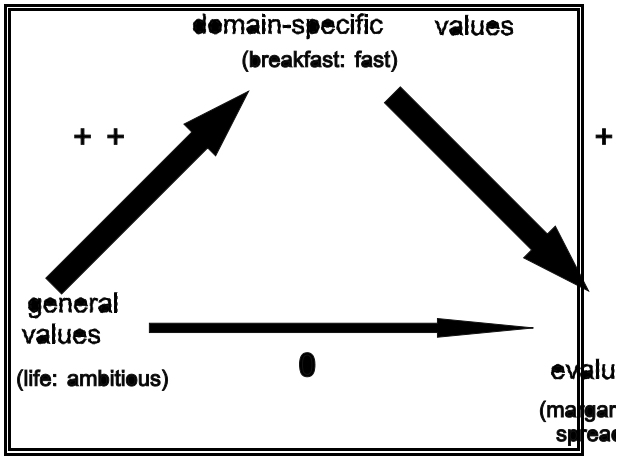
This paper is organized as follows. First, we will consider the segmentation bases of importance in our interactionist view. We then propose a conceptual model for an advanced person-situation segmentation base. The third and fourth section describe an empirical study and the results. Finally, we will discuss our conclusions.

1.1 Domain-specific values

A value is an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach, 1973). Research has shown that more often than not global values are unrelated in a direct sense to consuming. Since values are extremely general, they cannot deal with issues that relate to specific product consumption and brand choice behaviour in different markets and product categories (Kamakura and Novak, 1992; Sampson, 1992). Recently, psychological research is concentrating more

and more on explaining specific behaviour. General values are not very well suited to explain specific behavioral and evaluation differences. As alternative consumer variables, specific values are suggested, so-called domain-specific values. A domain is an area of behaviour that is aimed at the same goal (Verhallen and Pieters, 1984). We define domain-specific values as *the mental representations of important life goals that consumers are trying to achieve within a certain domain.* Studies confirm that general values correlate with domain-specific values but not with specific product evaluation. Domain-specific values however, correlate with specific product evaluations (Vinson, Scott and Lamont, 1977). Figure 2 represents schematically the relation between general values, domain-specific values and specific product evaluation. Between brackets an example for the domain 'breakfast' is given.

Figure 2: Domain-Specific Values



Also in segmentation studies there has been a plea for the domain-specific segmentation approach. In our study we will take this perspective under consideration.

1.2 Impact of usage situations

'People's actions are predictable from our knowledge of the meaning they ascribe to the situations in which they are located' (Kelly, 1955).
A clear distinction should be made between environment and situation. There

is little agreement on what defines an environment, judging from the amount of differing definitions (Belk, 1975a; Miller and Ginter, 1979; Dickson, 1982, Peter and Olson, 1993). We assume an environment to be every external (not part of the self) condition, tangible or intangible, influencing attitudes and behaviour (for a detailed review of consumer-environment interaction see Everett, Pieters and Titus, 1994). The border between self (consumer) and environment is not sharp at all. Research indicates that consumers may consider external objects such as clothing, pieces of art, but also certain food and beverages as part of their self (Belk, 1988). As noted before, situation and environment are not the same definitions. A certain situation is not always present while an environment is, a situation is a temporary environment. A situation can be defined as *all those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra-individual) and stimulus (choice alternative) attributes which have a demonstrable and systematic effect on behaviour* (Belk, 1975a). Belk divides these factors into physical elements (e.g. location), social elements (e.g. other persons present), temporal perspective (e.g time of day), task definition (e.g. a requirement to shop for), and antecedent states (e.g. momentary moods).

Situations always contain a human actor who is behaving for a purpose. This perspective suggests that individuals interact with their (temporary) environment. Consumers choose situations that suit particular goals and use products that are appropriate for achieving these goals in given situations. These goals can be divided into domain-specific goals and usage goals. Domain-specific goals are the values consumers consider to be important within a certain domain (domain-specific values). Usage goals are the desired benefits when using a certain product in a particular situation. A basic marketing principle is that consumers do not buy products, but what the product can do for them. Usage goals can be seen as the desired benefits obtained by using a product in a certain situation, the usage context. For example, in the domain cooking the usage goal (benefit) of olive oil 'should not be greasy' is determined by the usage situation 'frying'. Thus, in certain situations consumers have certain goals. These goals can be achieved

by using a certain product in a situation: the usage situation. *A usage situation is the social and physical environment where consumers actual use the product in order to achieve certain goals.*

Day, Shocker and Srivastava (1979) formulate two underlying premises for effective segmentation. First, customers seek the benefits that products provide rather than the physical product. Products are seen as 'benefit bundles'. Secondly, (potential) consumers view the available benefit bundle alternatives from the vantage point of usage contexts of which they have experience or the specific application they are considering. The usage of the product determines the bundle of benefits required, the usage goals. Clearly, where there are different usage contexts requiring a different bundle of benefits, distinct market segments exist.

1.3 Interaction

Usage situations have an impact on the usage goals of consumers. Domain-specific values are assumed to be determinants of the usage situation sought. Thus, usage goals grow directly from usage situations and indirectly from the domain-specific values. For example, in the domain cooking the usage goal of olive oil 'should not be greasy' is determined by the domain-specific value 'I like to cook healthy' and the usage situation 'frying'. The interaction of domain-specific values and usage situation can be described as follows: *within a certain domain consumers hold mental representations (domain-specific values) of important life goals that consumers are trying to achieve. Within this domain certain usage situations occur where consumers actual use a product in order to achieve certain domain-specific goals and situation-specific goals (usage goals).* In the next section we will present a conceptual model based on the interaction between domain-specific values and usage situations.

2. Conceptual model of person-situation segmentation

'Consumers behave to their preferences and wants in order to achieve specific benefits that are consistent with specific purposes. This purpose-

fulness suggests that individuals interact with their environment to achieve specific goals' (Stewart, 1991).

Consumers behave to their preferences, consequently the willingness to buy and use a product (again) is strongly dependent on the preference or evaluation of this product. A recently developed product evaluation theory is the Means-End Chain Theory (Gutman, 1982). Product evaluation is mainly based on the benefits (usage goals) of the product. This theory assumes a hierarchical relation between the attributes of a product, the benefits obtained by using the product and the general values of the consumer. Product evaluation can consist of three levels: 1. recognizing product attributes, 2. attaching benefits (usage goals) to these attributes, and 3. relating personal values to these benefits. These three levels can be extended into six levels (Olson and Reynolds, 1983). 1. recognizing concrete attributes, 2. recognizing abstract attributes, 3. attaching functional benefits to the attributes, 4. attaching psychosocial benefits to the attributes, 5. relating instrumental personal values to these benefits, 6. relating terminal values (global values) to these benefits.

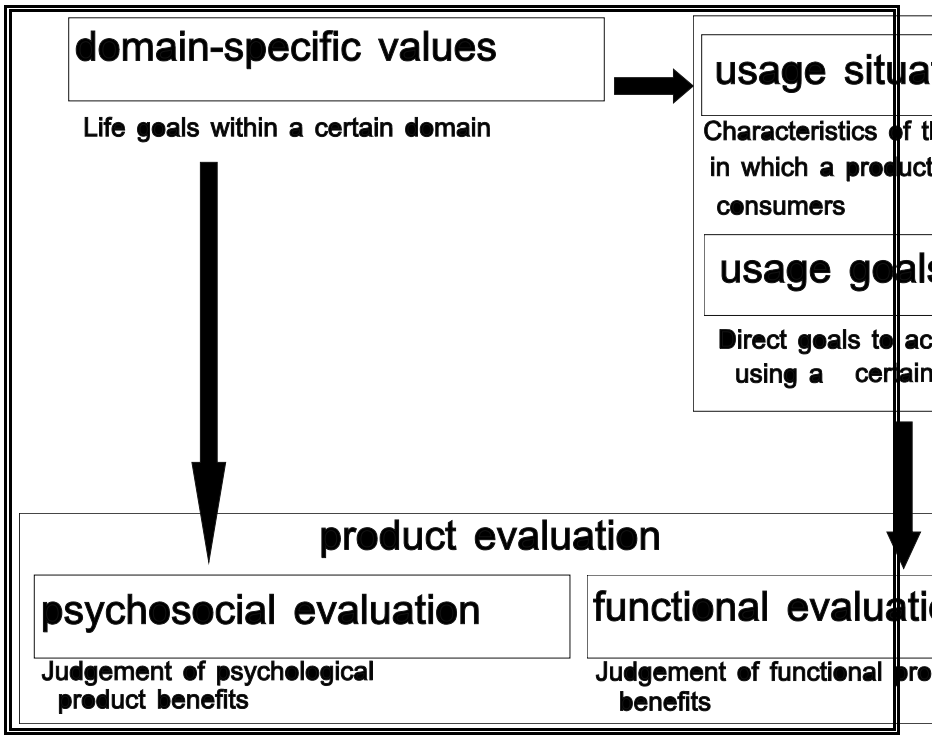
Product attributes have certain consequences in a particular usage situation: the product benefits. Depending on the usage situation and the personal values certain benefits are more or less important. In this study we will build on this theory. Therefore, we consider product benefit evaluation to result from both personal values and from attributes of usage situations, as benefits are more or less relevant in certain usage situations. Consumers will attach different interests to certain values. They will be especially appealed by those products or brands of which the product benefits can be associated with important domain-specific values they hold.

The willingness of buying and using or repeated buying/using is strongly determined by the consumer's evaluation (or expectation) of product performance, the product evaluation. Product evaluation will vary across usage goals and domain-specific values. The usage situation is influenced by domain-specific values. Consumers choose situations that suit particular goals and use products that are appropriate for achieving these goals in

certain situations. The set of products that the consumer considers appropriate for realizing specific goals will vary as a function of usage situations and domain-specific values. Using a product satisfies several needs (benefits) sought. These needs can be divided into functional and psychosocial needs. Functional needs are for example 'this olive oil has to be suitable for frying'. Psychosocial needs concern more image requirements of the product, like for example 'this oil must be nutritious and low in calories'. Consequently, we distinguish product evaluation in a similar way. Product evaluation comprises the evaluation of functional product benefits and psychosocial product benefits. Gutman (1991) suggested that the consumers' main focus of attention is at the benefit level. Two possible types of relations between benefits, attributes and values are of relevance. The first type is an instrumental relation which imposes a hierarchical structure, attributes lead to certain benefits, which produce value satisfaction. A second relation type is the reflective relation. Reflective relations run from more abstract (self-related) to less abstract (product-related) concepts. Relations may be from values to benefits, or from benefits to attributes (Pieters, Steenkamp and Wedel, 1991). As functional product performance more directly relates to the use of the product, we assume an instrumental relation from characteristics of the usage situation as the most important factor leading to functional benefit evaluation. We assume a reflective relation from domain-specific values to psychosocial benefit evaluation and to be mainly a function of domain-specific values, as it concerns psychological elements.

A person-situation market segmentation model is presented in Figure 3. This model integrates two types of segmentation bases: domain-specific consumer values and usage situation variables, and is build on Dickson's theoretical framework (1982).

Figure 3: Person-Situation Segmentation: A domain-specific approach


domain-specific values
Life goals within a certain domain
usage situa
Characteristics of t
in which a product
consumers
usage goals
Direct goals to ac
using a certain
product evaluation
psychosocial evaluation
Judgement of psychological
product benefits
functional evaluati
Judgement of functional pro
benefits

Our empirical study focuses on the evaluation of edible fats. The relationship between the product and the value attainment can be very indirect. The value attainment finally achieved will depend not only on the product itself, but also to a large degree on the usage situation and on the way food products are transformed into a meal (Grunert, Bunso and Bisp, 1993). We therefore distinguish the usage situation into a preparation part and a pure consumption part. Our data include the preparation part. We consider a usage situation to be for example, 'frying' or 'slow cooking'.

In summary our conceptual model assumes three kinds of relations. First, domain-specific values of consumers influence the choice of the usage situation. Secondly, domain-specific values of consumers will influence the psychosocial product evaluation. Third, usage situations chosen by consumers will influence the functional product evaluation. These assumptions lead to following hypotheses:

H1: The choice of usage situations is a function of domain-specific values.
Consumers choose situations that suit particular goals and use products that are appropriate for achieving these goals in certain situations.

H2: Psychosocial product evaluation is mainly influenced by domain-specific values.
Psychosocial evaluation is thought to be a function of domain-specific values, as psychosocial benefits are assumed to follow from values.

H3: Functional product evaluation is mainly influenced by usage situations.
As functional product performance more directly relates to the use of the product, we assume usage situation to be the most important factor for the functional evaluation. Usage situations are thought to give relevance to certain benefits. The preceding hypotheses lead to the fourth hypothesis:

H4: Product evaluation, comprising functional evaluation and psychosocial evaluation, is a function of usage situations and domain-specific values.
The objective of this study is to develop and test a conceptual model which proposes an interaction of two segmentation bases.

3. Study

3.1 Sample and data collection

A national quota sample of 598 Italian families was drawn with respect to age, region and rural/urban. The study focuses on the evaluation of products in the context of a food habit study that included an eight-day diary of meal preparation and questionnaires concerning food usage, food stock, food buying, and food evaluation. The focus of the present study is on the

evaluation of edible fats (butter, margarine, extra quality olive oil, and standard olive oil) used in 7 different types of applications (spreading on bread, raw on salad, raw on hot foods, quick cooking, slow cooking, frying, and pastry). The evaluation of edible fats comprises 16 items, both psychosocial and functional benefits.

3.2 Procedure

The total time span of the data collection was 14 days. Respondents held an 8-day diary in which they recorded a number of details regarding each meal preparation.

Recordings included the amount of different used applications (usage situations), frequency of products/brands used, usage amount, and meal context. Before the respondents received the diary, they completed a questionnaire containing socio-demographic questions (e.g. age, family size, region). When the diaries were collected the respondents received a second questionnaire with questions regarding cooking and food motives (domain-specific values) and product evaluation. The domain-specific values are measured by statements. The subjects indicated the level of agreement with these statements on a scale from 1 'strongly agree' to 5 'strongly disagree'. Examples of domain-specific value statements are 'it is important my family eats healthy' and 'consider myself a good cook'. Product evaluation was measured by functional statements and psychosocial statements. The statements concerned the edible fats which had actually been used. The importance of the statements was indicated on a scale from 1 'extremely important' to 9 'totally not important'. Examples of functional statements are 'light, easy to digest' and 'not easily go rancid'. Examples of psychosocial statements are 'suitable for the whole family' and 'natural, pure'.

The data set for the present purpose, holds information about socio-demographic characteristics, domain-specific values and the use and evaluation of edible fats. In terms of our conceptual model the used data set contains the following elements: 28 domain-specific values, 7 usage situations (spreading on bread, raw on salad, raw on hot foods, quick cooking, slow cooking, frying and, pastry), 4 edible fats (butter, margarine, extra quality olive oil, standard olive oil), 8 functional evaluations and 8

psychosocial evaluations.

4. Results

4.1 Analysis approach

The first objective of our analyses is to structure the domain-specific values by person segmentation. The following steps are made:

- Structure the domain-specific values, using factor analysis to find a segmentation base.
- Segment consumers on the basis of the domain-specific value factors.
- Perform internal analyses on the segments (structure/homogeneity).
- Perform external analyses on the segments to determine their socio-demographic profiles.

The results of these analyses are presented in table 1.

The second objective is to test the hypotheses described as:

- The relation of person segments and usage situations.
- The relation of person segments and psychosocial evaluation.
- The relation of usage situations and functional evaluations.
- The interaction of person segments and usage situations with product evaluation.

The results of these analyses are presented in table 2, 3, 4 and 5.

4.2 Results

Person segmentation

The structure in the domain-specific values is analyzed by means of principal component analysis (PCA). The PCA on the 28 domain-specific values revealed a 8-factor structure that explained 53% of the variance (appendix 1). We choose the first 4 factors, as these were clearly interpretable and explained most of the variance (37%). Next, K-means clustering was performed using the 4 factor scores. A 4-cluster solution provides the best interpretable cluster profiles, the distance between the clusters is satisfying, and the cluster size is relatively equal. When we define our clusters in terms of the domain-specific values held, clusters can be described as follows:

*** Cluster 1: Cooking and eating is considered a hobby**

*** Cluster 2: Modern cooking, health is important**

*** Cluster 3: Traditional cooking, health is important**

*** Cluster 4: Cooking and eating is considered an obligation**

The external analysis of the clusters is presented in table 1. This includes the comparison of the clusters with each other in terms of their socio-demographic variables. From now on we will refer to the clusters as DSV-segments (Domain-Specific Values segments).

Table 1: DSV-segment profile

Segment 1	**Cooking and eating is considered a hobby**	**N=165**
Most of the respondents are married (90%) and not working outdoor (73%). The average age is 42 years. This segment is mostly present in the older age categories (35-65 years) and least represented in the youngest age category (18-24 years). The average size of the family is 4 persons. This segment is especially found in the South of Italy.		
Segment 2	**Modern cooking, health is important**	**N=109**
Most of the respondents are married (84%) and not working outdoor (70%). The average age is 42 years. This segment is mostly found in the middle age category (35-49 years), relatively least represented in the older age category (50-65 years), and relatively most present in the youngest age category (18-24 years). The average family size is 3 persons. This segment is especially found in the North/West of Italy.		
Segment 3	**Traditional cooking, health is important**	**N=167**
Most of the respondents are married (94%) and not working outdoor (78%). The average age is 42,5 years. This segment is mostly present in the older age categories (35-65 years), and relatively least present in the youngest age category (18-24 years). The average size of the family is 4 persons. This segment is mainly found in the North/West of Italy.		
Segment 4	**Cooking and eating is considered an obligation**	**N=157**
Most of the respondents are married (81%) and not working outdoor (79%).		

The average age is 41,5 years. This segment is mostly found in the middle age category (35-49 years). The average family size is 3 persons. This segment is especially found in the North/East of Italy.

Usage situation and DSV-segments

After the person segmentation the next step is to test the relevance of the assumed relations. To test the hypothesis that domain-specific values relate the choice of the usage situation, analyses on the relations between the segments and the different applications are performed. The results are presented in Table 2.

Table 2: Differences in usage situations by DSV-segments

ANOVA Usage situation by Segments	F-value	p	df
	6.607	.000	3

	Usage situation			
Segment	Spreading	Raw on bread	Raw on salad	Quick hot foods cooking
1. Hobby	12.7%	4.1%	5.6%	.3%
2. Modern health	8.5%	2.8%	3.7%	.2%
3. Traditional health	12.5%	4.4%	5.8%	.5%
4. Obligation	11.6%	4.6%	5.6%	.2%

	Usage situation		
Segment	Slow	Frying	Pastry cooking
1. Hobby	2.4%	1.5%	1.1%
2. Modern health	1.4%	1.0%	.7%
3. Traditional health	2.0%	1.7%	1.3%
4. Obligation	1.7%	1.3%	.6%

Table 2 displays the differences in usage situation chosen by consumers of the four domain-specific value segments. The significant F-value supports the assumption that the choice of usage situations differs by the domain-specific values held. Edible fats for spreading on bread, raw on salad, raw on hot foods and quick cooking are least used by the traditional, health considering consumer. Frying is mostly applied by the traditional consumer considering cooking a hobby. Pastry is especially made by those respondents who consider cooking as a hobby.

The next analysis step concerns the influence of domain-specific values on psychosocial product evaluation. ANOVA is carried out on psychosocial product evaluation for the different segments and the different usage situations. The results in Table 3 partially support the hypothesis that psychosocial product evaluation is mainly influenced by domain-specific values. Psychosocial evaluation shows more significant influences from domain-specific values than from usage situations. However, not all differences in psychosocial evaluation by domain-specific values are statistically significant.

Table 3: Psychosocial product evaluation and relations with DSV-segments and usage situations

Psychosocial statements	DSV-segments F-value	p	df	Usage situations F-value	p	df
Nourishing	2.65	.05	3	2.55	.02	6
Natural,pure	2.87	.04	3	7.15	.00	6
Suitable for family	2.59	.05	3	53.33	.00	6
Recommended by ads	1.63	.19	3	1.48	.19	6
Suitable for diet	4.99	.00	3	1.46	.18	6
Value for money	3.72	.01	3	.60	.73	6
Inexpensive	.27	.85	3	.68	.67	6

Healthy food	11.40	.00	3	1.31	.25	6

To test the hypothesis that functional evaluation is mainly influenced by usage situations, analyses of variance are performed on the 8 functional product evaluation statements, and their relation with the DSV-segments and usage situations. The results are presented in Tables 4a, and 4b. We selected two usage situations: 'raw on salad' and 'quick cooking', and one edible fat 'extra olive oil'. An exploratory analysis showed that similar results will be found with the other usage situations. So, this selection does not alter the general results or implications.

Table 4a: Functional evaluation and relations with usage situations

Functional statements	F-value	p	df
Natural taste	221.76	.00	1
Gives pleasant smell	9.43	.00	1
Not easily go rancid	37.28	.00	1
Distinct flavour	72.82	.00	1
Gives nice flavour	1201.11	.00	1
Right fluidity	.09	.76	1
Makes nice sauce	23.96	.00	1
Light, easy to digest	8.85	.00	1

The results from Table 4a show that product evaluation is significantly related to usage situation. Nearly all the F-values are significant.

Table 4b presents the functional evaluations and their relation with the DSV-segments. ANOVA is performed on the functional product evaluation for the four segments.

Table 4b: Functional evaluation and relations with DSV-segments

Functional statements	F-value	p	df

Natural taste	.19	.90	3
Gives pleasant smell	1.29	.28	3
Not easily go rancid	.53	.66	3
Distinct flavour	1.00	.39	3
Gives nice flavour	.69	.56	3
Right fluidity	.97	.41	3
Makes nice sauce	1.46	.22	3
Light, easy to digest	2.29	.09	3

The results from Table 4a and 4b support hypothesis 3: functional product evaluation does not show a significant difference between the segments, but differs significantly between the usage situations.

Product evaluation as a function of DSV-segments and usage situation

The results of a two-way ANOVA presented in Table 5 support hypothesis four: product evaluation, both functional and psychosocial, is a function of usage situation and domain-specific values.

Table 5: Functional and psychosocial product evaluation within the usage situations 'raw on salad' and 'quick cooking' for DSV-segments

	DSV-segments	Usage situation	Interaction
Functional statements	F-value	F-value	F-value
Natural taste	.38	815.20**	.36
Gives pleasant smell	1.59	10.46**	1.61
Not easily go rancid	.73	1310.00**	1.08
Distinct flavour	.80	71.20**	.47
Gives nice flavour	.31	1184.00**	.03
Right fluidity	.99	.13	.21
Makes nice sauce	1.15	22.80**	.61
Light, easy to digest	1.95	8.0**	.43

Psychosocial statements	DSV-segments F-value	Usage situation F-value	Interaction F-value
Nourishing	1.29	.47	.58
Natural,pure	1.71	6.46**	1.52
Suitable for family	1.57	157.90**	1.27
Recommended by ads	1.46	1.07	.40
Suitable for diet	11.58**	2.11	2.29
Value for money	1.15	1.34	1.34
Inexpensive	1.07	.02	.25
Healthy food	.69	.03	.61

The asterisks show the significance level of the F-values: ** p<.01

From Table 5 it becomes evident that functional product evaluation differs strongly between the usage situations, the psychosocial product evaluation however does not differ much by the domain-specific value segments nor the usage situations. There is also no significant interaction between DSV-segments and usage situations on product evaluation. This indicates that usage situations are mainly responsible for the difference in product evaluation while DSV-segments have an indirect effect via the choice of usage situation on the evaluation of products.

These results show that product evaluation depends both on consumer characteristics as well as on usage situations. This indicates that domain-specific values and usage situations are both to be the basic elements in a person-situation segmentation base.

5. Conclusions and discussion

This study emphasized the development of a segmentation base consisting of both person characteristics and situation characteristics. The results indicate that the discovery of such segments requires a more complex approach to segmentation that uses individual by usage situation as the basic building block for segmentation. The hypothesis is supported that the choice of usage situations is affected by the domain-specific values held by consumers. The hypothesis that psychosocial product evaluation is determined by domain-specific values is partly supported. Functional product evaluation is affected by usage situations and not by domain-specific values. The results of this study support our proposed conceptual model.

An implication of this study is that future research on product evaluation as well as on market segmentation should take into account the influence of usage situations and the domain-specific personal values. Marketing implications include the concern of the situations in which a product is used.

This gives a better insight in the reason why certain products are used and is therefore useful in product development and in the development of promotional activities. Market segmentation is the corner-stone for product positioning. But products used in different situations have different competitors.

In this research product evaluation is measured by means of 'importance' statements. The importance indicated does not have to apply to the specific product but can be a general evaluation. Survey and diary methods are used to collect data. As usage situations are experienced by consumers they should be the one to define situations in psychological and objective characteristics. The results presented here are only a partial test of the conceptual model developed. Additional analyses will be carried out in the near future to study the model in more detail. In the present study we have focused on the preparation element of the usage situation. It is certainly not the only way to define a usage situation. Future research will have to investigate more and other aspects of usage situations, for example the pure consumption part, and its influence on product evaluation. Our available data set is adequate for such analyses. Also further attempts to develop a

theory of situations that goes beyond a mere definition of dimensions of situations, and that describes the processes that are engaged in the situational behaviour of consumers will have to be made.

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Appendix 1

Principal Component Analysis on the domain-specific values

	FACTOR			
Domain-specific values	1	2	3	4
Only cook because my family has to eat	.71	.02	.13	-.01
Always been interested in cooking	-.64	.24	.31	.21
Faster finish cooking the better	.64	.11	-.11	.06
Cooking is housewife most pleasant job	-.62	.32	.14	.16
Someone offered to help I accept	.59	.07	.14	-.15
Choose products that save me time	.59	.16	-.08	-.04
Consider myself a good cook	-.48	.27	.32	.23
If money, I would eat out every night	.44	.32	.14	-.07
Do not like cooking for myself	.42	.03	.04	.12
Not spend lot time at week of cooking	.41	-.06	.06	-.08
I like eating	-.03	.68	.04	.06
I consumer more calories than I need	.08	.66	-.01	.02
Often eat to many fat	.11	.65	-.03	-.12
Pleasure of eating together is important	-.26	.54	.07	.11
Meal should always end with dessert	.09	.47	.08	.06
To be up-to-date with fashion	.22	-.10	.64	.19
Occasionally prepare unusual plates	-.31	.13	.60	.05
Sometimes prepare recipes from magazine	-.20	.04	.57	-.11
Often try new foods	.07	.21	.56	-.27
Taking good care of myself	.21	-.13	.51	.24
Important to be complimented	-.20	.12	.44	.13
Tend to do the cooking myself	-.15	.04	-.04	.63
When cook, I use fresh food	-.01	.01	.01	.57
Important my family eats healthy	.01	-.08	.10	.52
Afraid of chemical ingredients	.01	.03	.03	.47
Always think about health	.07	-.10	.28	.42
Prefer to cook without anyone helping	-.14	.18	-.03	.36

Like managing the house		−.19	.25	−.03	.38
Eigenvalues	4.19	2.49	1.97	1.72	
Pct of variance		15.0	8.9	7.0	6.2